

Now you are ready for:
Exs. 21-40 on pp. 191-192

Look Back

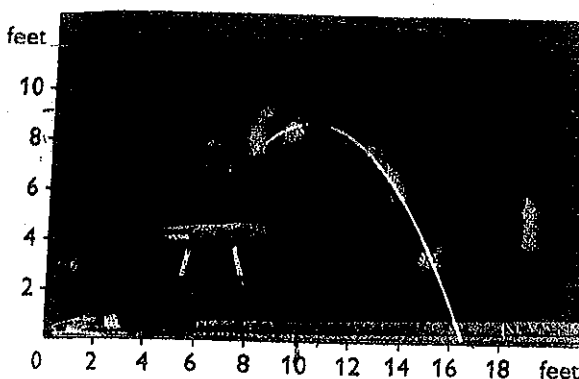
Explain how you would find the maximum or minimum value of a quadratic function.

4-1 Exercises and Problems

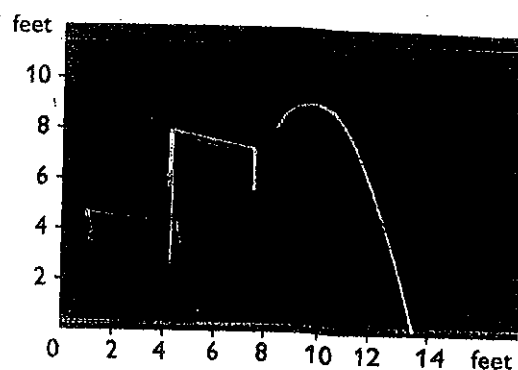
Reading How are the graph of the Water Arc and the graph in Sample 1 alike? How are they different?

Estimate the vertex of the parabola that describes the movement of each gymnast.

2.



3.



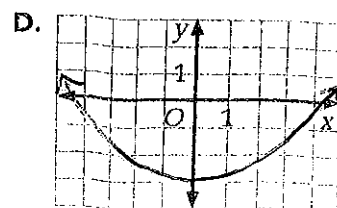
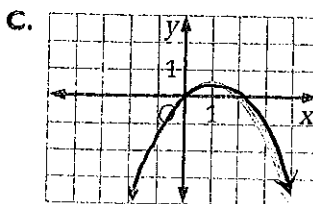
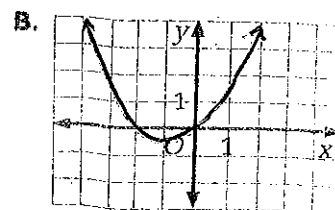
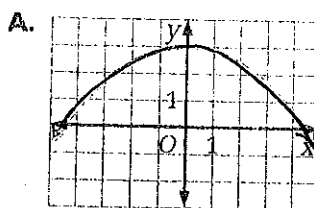
Match each function with its graph.

4. $y = 0.5x^2 + x$

5. $y = -0.5x^2 + x$

6. $y = -0.15x^2 + 3$

7. $y = 0.15x^2 - 3$



Without graphing, tell whether the graph of each function opens up or down.

8. $y = -5x^2 + 6$

9. $y = x^2 - 3$

10. $y = -0.7x^2 - 6x$

Find an equation for the line of symmetry for the graph of each function.

11. $y = -2x^2 + 6x$

12. $y = x^2 + 3$

13. $y = 3x^2 - 6x + 17$

$x = -\frac{b}{2a}$